

# ACID CLEANER 230E

PRODUCT DATA SHEET  
EDITION 02 – 03 September 2018

## PRODUCT DESCRIPTION

Acid Cleaner 230E is specifically formulated for cleaning copper surfaces.

The use of Acid Cleaner 230E ensures excellent copper surface preparation for subsequent playing processes.

Equipment	Material
Tank	PVC, PP, PE
Heather	Teflon, Quartz

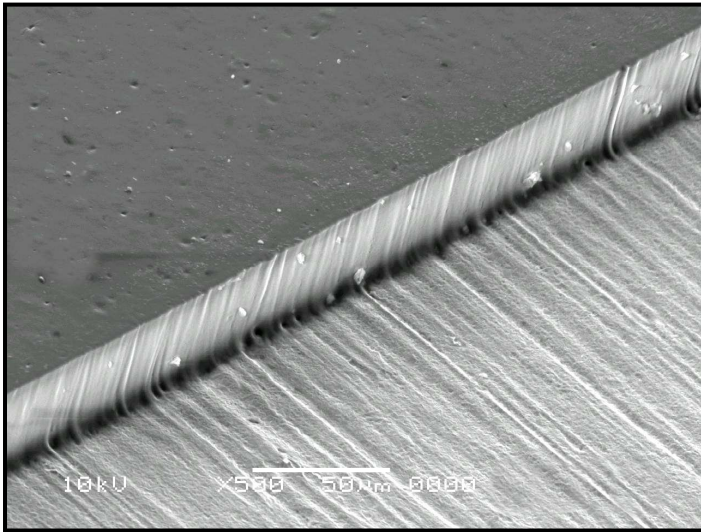
## OPERATING PARAMETERS

Parameters	Range	Optimum
Acid Cleaner 230E	200 – 300 ml/l	250 ml/l
Dwell time	2 – 4 min	3 min
Temperature	25 – 35°C	30°C

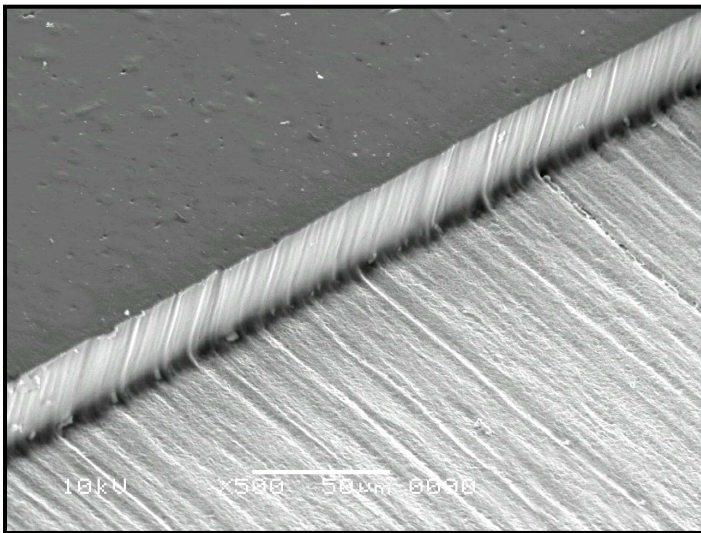
## REPLENISHMENT

Acid Cleaner 230E should be replaced when the solution becomes turbid. This is after approximately 5 m<sup>2</sup> of laminate processed or a copper level of 2000 ppm.

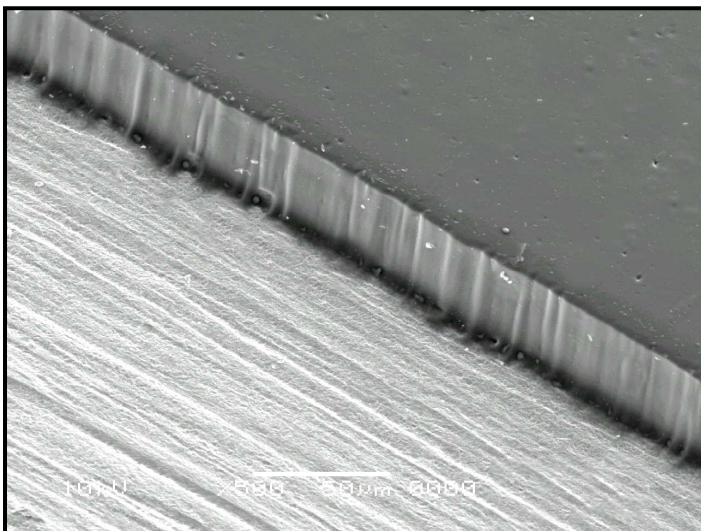
## EFFECT OF ACID CLEANER 230E ON ORDYL DRY FILM



**Before treatment with  
Acid Cleaner 230E**



**After 3 min treatment with  
Acid Cleaner 230E**



**After 10 min treatment with  
Acid Cleaner 230E**

**As can be noted Acid Cleaner 230E does not attack in any way Ordyl dry films**

## ANALYSIS PROCEDURE

### Determination of Acid Cleaner 230E Concentration

#### Equipment

- 5 ml pipette
- 50 ml burette
- 250 ml Erlenmeyer flask

#### Reagents

- NaOH Solution 1.0N
- Methyl Orange Indicator

#### Procedure

1. Pipette 10 ml of working solution into a 250 ml Erlenmeyer flask
2. Add 100 ml of DI water
3. Add 4-5 drops of Methyl Orange Indicator
4. Titrate with NaOH 1.0N until solution turn from orange to yellow

#### Calculation

Concentration Acid Cleaner 230E (ml/l) = mls of NaOH \* 53

## PACKAGING

25 litre or 200 litre polyéthylène drums.

## STORAGE

Only store Acid Cleaner 230E in original containers, upright, away from direct sunlight and in a dry area at 10-32°C. Keep container closed when not in use.

## DISPOSAL

It is the user's responsibility to verify that treatment procedures comply with local regulations. Working solutions should be diluted, neutralized and disposed of in accordance with local regulations.

## **HANDLING PRECAUTIONS**

Acid Cleaner 230E is highly acid and require the normal precautions for the handling of strong acids.

Avoid contact with skin and eyes, handle with care, wear chemical goggles, chemical gloves and suitable protective clothing when handling.

In case of contact, flush affected area with copious amounts of cold, clean water for at least 10 minutes.

In case of serious exposure, particularly for eyes, obtain medical attention for acid burn.

**READ MATERIAL SAFETY DATA SHEET PRIOR TO HANDLING THIS PRODUCT**

**In case of order please indicate this code:**

**Acid Cleaner 230E**

**GC 1003**

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The seller binds itself only to deliver goods in accordance with the general description upon which they are sold whether or not any special particular description shall have been given or implied by law.

Any such special or particular description shall be taken only as the expression of seller's opinion in that behalf. The seller does not give any warranty as to the quality (save that the goods are of merchantable quality), state condition fitness of the goods or use to which the goods may be put.

Claims on account of weight, loss of or damage to the goods in transit ( so far as seller is liable) shall be made in writing to the seller within the period of 30 days of receipt thereof.

No claim shall be entertained after the expiration of the appropriate period mentioned above and the seller's liability by reason of any such claim shall not in any event the purchase price of the goods in respect of which a claim is made. Goods shall not be returned to the seller without the seller's express written permission.



**HEADQUARTER**

Via della Merlata, 8  
20014 Nerviano (MI) ITALY  
T. +39 0331 58 69 47  
F. +39 0331 58 77 51

UNI EN ISO 9001:2015  
UNI EN ISO 14001:2015



**MANUFACTURING SITE**

Via C. Chiesa, 30  
20010 Pogliano M.se (MI) ITALY  
T. + 39 02 93 55 90 06  
F. +39 02 93 55 90 07

elgaeurope@pec.it  
R.E.A. Milano n. 861433  
Reg. Imp. di Milano n. 154339  
C.F. /P.IVA 01857060154  
Cap. Soc. € 3.014.026,00 I.V.

[www.elgaeurope.it](http://www.elgaeurope.it)